

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/812,2380  
Source: 1F4/6  
Date Processed by STIC: 4/13/06

# ***ENTERED***

## CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/812,2380 \_\_\_\_\_

CRF Edit Date: 4/13/06  
Edited by:   m  

\_\_\_\_\_ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

\_\_\_\_\_ Corrected the SEQ ID NO. Sequence numbers edited were:

\_\_\_\_\_

\_\_\_\_\_ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

\_\_\_\_\_

  /   Deleted:   /   invalid beginning/end-of-file text ; \_\_\_\_\_ page numbers

\_\_\_\_\_ Inserted mandatory headings/numeric identifiers, specifically:

\_\_\_\_\_

\_\_\_\_\_ Moved responses to same line as heading/numeric identifier, specifically:

\_\_\_\_\_

\_\_\_\_\_ Other:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



IFW16

## RAW SEQUENCE LISTING

DATE: 04/13/2006

PATENT APPLICATION: US/10/812,238D

TIME: 19:19:30

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04132006\J812238D.raw

3 <110> APPLICANT: Wary, Kishore, K.  
 4 Humtsoe, Joseph O.  
 6 <120> TITLE OF INVENTION: Uses of Vascular Endothelial Growth Factor  
 7 and Type I Collagen Inducible Protein (VCIP)  
 9 <130> FILE REFERENCE: D6563  
 11 <140> CURRENT APPLICATION NUMBER: US 10/812,238D  
 12 <141> CURRENT FILING DATE: 2004-03-29  
 14 <150> PRIOR APPLICATION NUMBER: US 60/458,164  
 15 <151> PRIOR FILING DATE: 2003-03-27  
 17 <160> NUMBER OF SEQ ID NOS: 42  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 15  
 21 <212> TYPE: PRT  
 22 <213> ORGANISM: Unknown  
 24 <220> FEATURE:  
 25 <221> NAME/KEY: CHAIN  
 26 <223> OTHER INFORMATION: peptide used to raise anti-VCIP-cyto-C16  
 27 antibody  
 29 <400> SEQUENCE: 1  
 30 Leu Ser Pro Val Asp Ile Ile Asp Arg Asn Asn His His Asn Met  
 31 5 10 15  
 33 <210> SEQ ID NO: 2  
 34 <211> LENGTH: 20  
 35 <212> TYPE: PRT  
 36 <213> ORGANISM: Unknown  
 38 <220> FEATURE:  
 39 <221> NAME/KEY: CHAIN  
 40 <223> OTHER INFORMATION: peptide used to raise anti-VCIP-RGD antibody  
 42 <400> SEQUENCE: 2  
 43 Glu Gly Tyr Ile Gln Asn Tyr Arg Cys Arg Gly Asp Asp Ser Lys  
 44 5 10 15  
 45 Val Gln Glu Ala Arg  
 46 20  
 48 <210> SEQ ID NO: 3  
 49 <211> LENGTH: 33  
 50 <212> TYPE: DNA  
 51 <213> ORGANISM: Artificial Sequence  
 53 <220> FEATURE:  
 54 <221> NAME/KEY: primer\_bind  
 55 <223> OTHER INFORMATION: forward primer for VCIP  
 57 <400> SEQUENCE: 3  
 58 ggaggatccc tcgcgccgca gccagcgcca tgc 33  
 60 <210> SEQ ID NO: 4

## RAW SEQUENCE LISTING

DATE: 04/13/2006

PATENT APPLICATION: US/10/812,238D

TIME: 19:19:30

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04132006\J812238D.raw

```

61 <211> LENGTH: 25
62 <212> TYPE: DNA
63 <213> ORGANISM: Artificial Sequence
65 <220> FEATURE:
66 <221> NAME/KEY: primer_bind
67 <223> OTHER INFORMATION: reverse primer for VCIP
69 <400> SEQUENCE: 4
70 gtggcaccta catcatgttg tgggtg      25
72 <210> SEQ ID NO: 5
73 <211> LENGTH: 22
74 <212> TYPE: DNA
75 <213> ORGANISM: Artificial Sequence
77 <220> FEATURE:
78 <221> NAME/KEY: primer_bind
79 <223> OTHER INFORMATION: forward primer for human uPAR
81 <400> SEQUENCE: 5
82 cttcctgaaa tgcgtcaaca cc      22
84 <210> SEQ ID NO: 6
85 <211> LENGTH: 22
86 <212> TYPE: DNA
87 <213> ORGANISM: Artificial Sequence
89 <220> FEATURE:
90 <221> NAME/KEY: primer_bind
91 <223> OTHER INFORMATION: reverse primer for human uPAR
W--> 92 <400> SEQUENCE: 6
93 tcatagctgg gaaaactgag gc      22
95 <210> SEQ ID NO: 7
96 <211> LENGTH: 22
97 <212> TYPE: DNA
98 <213> ORGANISM: Artificial Sequence
100 <220> FEATURE:
101 <221> NAME/KEY: primer_bind
102 <223> OTHER INFORMATION: forward primer for b???-actin
104 <400> SEQUENCE: 7
105 ggctgtgcta tcctgtacg cc      22
107 <210> SEQ ID NO: 8
108 <211> LENGTH: 22
109 <212> TYPE: DNA
110 <213> ORGANISM: Artificial Sequence
112 <220> FEATURE:
113 <221> NAME/KEY: primer_bind
114 <223> OTHER INFORMATION: reverse primer for b???-actin
116 <400> SEQUENCE: 8
117 gggcagtgat ctcttctgc at      22
119 <210> SEQ ID NO: 9
120 <211> LENGTH: 23
121 <212> TYPE: DNA
122 <213> ORGANISM: Artificial Sequence
124 <220> FEATURE:

```

## RAW SEQUENCE LISTING

DATE: 04/13/2006

PATENT APPLICATION: US/10/812,238D

TIME: 19:19:30

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04132006\J812238D.raw

```

125 <221> NAME/KEY: primer_bind
126 <223> OTHER INFORMATION: forward primer for GAPDH
128 <400> SEQUENCE: 9
129 ggtctcctct gacttcaaca gcg      23
131 <210> SEQ ID NO: 10
132 <211> LENGTH: 24
133 <212> TYPE: DNA
134 <213> ORGANISM: Artificial Sequence
136 <220> FEATURE:
137 <221> NAME/KEY: primer_bind
138 <223> OTHER INFORMATION: reverse primer for GAPDH
140 <400> SEQUENCE: 10
141 ggtactttat tgatggtaca tgac      24
142 <210> SEQ ID NO: 11
143 <211> LENGTH: 6
144 <212> TYPE: PRT
145 <213> ORGANISM: Unknown
147 <220> FEATURE:
148 <221> NAME/KEY: CHAIN
149 <223> OTHER INFORMATION: a peptide containing RGD sequence
151 <400> SEQUENCE: 11
152 Gly Arg Gly Asp Ser Pro
153      5
155 <210> SEQ ID NO: 12
156 <211> LENGTH: 9
157 <212> TYPE: PRT
158 <213> ORGANISM: Unknown
160 <220> FEATURE:
161 <221> NAME/KEY: CHAIN
162 <223> OTHER INFORMATION: HA-tag
164 <400> SEQUENCE: 12
165 Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
166      5
168 <210> SEQ ID NO: 13
169 <211> LENGTH: 311
170 <212> TYPE: PRT
171 <213> ORGANISM: Unknown
173 <220> FEATURE:
174 <221> NAME/KEY: CHAIN
175 <223> OTHER INFORMATION: human VCIP
177 <400> SEQUENCE: 13
178 Met Gln Asn Tyr Lys Tyr Asp Lys Ala Ile Val Pro Glu Ser Lys
179      5      10      15
180 Asn Gly Gly Ser Pro Ala Leu Asn Asn Asn Pro Arg Arg Ser Gly
181      20      25      30
182 Ser Lys Arg Val Leu Leu Ile Cys Leu Asp Leu Phe Cys Leu Phe
183      35      40      45
184 Met Ala Gly Leu Pro Phe Leu Ile Ile Glu Thr Ser Thr Ile Lys
185      50      55      60

```

## RAW SEQUENCE LISTING

DATE: 04/13/2006

PATENT APPLICATION: US/10/812,238D

TIME: 19:19:30

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04132006\J812238D.raw

```

186 Pro Tyr His Arg Gly Phe Tyr Cys Asn Asp Glu Ser Ile Lys Tyr
187                               65                               70                               75
189 Pro Leu Lys Thr Gly Glu Thr Ile Asn Asp Ala Val Leu Cys Ala
190                               80                               85                               90
191 Val Gly Ile Val Ile Ala Ile Leu Ala Ile Ile Thr Gly Glu Phe
192                               95                               100                              105
193 Tyr Arg Ile Tyr Tyr Leu Lys Lys Ser Arg Ser Thr Ile Gln Asn
194                               110                              115                              120
195 Pro Tyr Val Ala Ala Leu Tyr Lys Gln Val Gly Cys Phe Leu Phe
196                               125                              130                              135
197 Gly Cys Ala Ile Ser Gln Ser Phe Thr Asp Ile Ala Lys Val Ser
198                               140                              145                              150
199 Ile Gly Arg Leu Arg Pro His Phe Leu Ser Val Cys Asn Pro Asp
200                               155                              160                              165
201 Phe Ser Gln Ile Asn Cys Ser Glu Gly Tyr Ile Gln Asn Tyr Arg
202                               170                              175                              180
203 Cys Arg Gly Asp Asp Ser Lys Val Gln Glu Ala Arg Lys Ser Phe
204                               185                              190                              195
205 Phe Ser Gly His Ala Ser Phe Ser Met Tyr Thr Met Leu Tyr Leu
206                               200                              205                              210
207 Val Leu Tyr Leu Gln Ala Arg Phe Thr Trp Arg Gly Ala Arg Leu
208                               215                              220                              225
209 Leu Arg Pro Leu Leu Gln Phe Thr Leu Ile Met Met Ala Phe Tyr
210                               230                              235                              240
211 Thr Gly Leu Ser Arg Val Ser Asp His Lys His His Pro Ser Asp
212                               245                              250                              255
213 Val Leu Ala Gly Phe Ala Gln Gly Ala Leu Val Ala Cys Cys Ile
214                               260                              265                              270
215 Val Phe Phe Val Ser Asp Leu Phe Lys Thr Lys Thr Thr Leu Ser
216                               275                              280                              285
217 Leu Pro Ala Pro Ala Ile Arg Lys Glu Ile Leu Ser Pro Val Asp
218                               290                              295                              300
219 Ile Ile Asp Arg Asn Asn His His Asn Met Met
220                               305                              310

```

222 &lt;210&gt; SEQ ID NO: 14

223 &lt;211&gt; LENGTH: 18

224 &lt;212&gt; TYPE: PRT

225 &lt;213&gt; ORGANISM: Unknown

227 &lt;220&gt; FEATURE:

228 &lt;221&gt; NAME/KEY: CHAIN

229 &lt;223&gt; OTHER INFORMATION: lipid phosphatase domain of human VCIP

231 &lt;400&gt; SEQUENCE: 14

```

232 Asp Ile Ala Lys Val Ser Ile Gly Arg Leu Arg Pro His Phe Leu
233                               5                               10                               15

```

234 Ser Val Cys

236 &lt;210&gt; SEQ ID NO: 15

237 &lt;211&gt; LENGTH: 18

238 &lt;212&gt; TYPE: PRT

239 &lt;213&gt; ORGANISM: Unknown

## RAW SEQUENCE LISTING

DATE: 04/13/2006

PATENT APPLICATION: US/10/812,238D

TIME: 19:19:30

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04132006\J812238D.raw

```

241 <220> FEATURE:
242 <221> NAME/KEY: CHAIN
243 <223> OTHER INFORMATION: a rat peptide containing lipid
244     phosphatase domain
246 <400> SEQUENCE: 15
247 Asp Ile Ala Lys Tyr Ser Ile Gly Arg Leu Arg Pro His Phe Leu
248             5             10             15
249 Ala Val Cys
251 <210> SEQ ID NO: 16
252 <211> LENGTH: 18
253 <212> TYPE: PRT
254 <213> ORGANISM: Unknown
256 <220> FEATURE:
257 <221> NAME/KEY: CHAIN
258 <223> OTHER INFORMATION: a mouse peptide containing lipid
259     phosphatase domain
261 <400> SEQUENCE: 16
262 Asp Ile Ala Lys Tyr Thr Ile Gly Ser Leu Arg Pro His Phe Leu
263             5             10             15
264 Ala Ile Cys
266 <210> SEQ ID NO: 17
267 <211> LENGTH: 18
268 <212> TYPE: PRT
269 <213> ORGANISM: Unknown
271 <220> FEATURE:
272 <221> NAME/KEY: CHAIN
273 <223> OTHER INFORMATION: a human peptide containing lipid
274     phosphatase domain
276 <400> SEQUENCE: 17
277 Asp Leu Ala Lys Tyr Met Ile Gly Arg Leu Arg Pro Asn Phe Leu
278             5             10             15
279 Ala Val Cys
281 <210> SEQ ID NO: 18
282 <211> LENGTH: 18
283 <212> TYPE: PRT
284 <213> ORGANISM: Unknown
286 <220> FEATURE:
287 <221> NAME/KEY: CHAIN
288 <223> OTHER INFORMATION: a Drosophila peptide containing lipid
289     phosphatase domain
291 <400> SEQUENCE: 18
292 Asn Ile Ala Lys Tyr Ser Ile Gly Arg Leu Arg Pro His Phe Tyr
293             5             10             15
294 Thr Leu Cys
296 <210> SEQ ID NO: 19
297 <211> LENGTH: 18
298 <212> TYPE: PRT
299 <213> ORGANISM: C. elegans
301 <220> FEATURE:

```

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/812,238D

DATE: 04/13/2006  
TIME: 19:19:31

Input Set : A:\PTO.AMC.txt  
Output Set: N:\CRF4\04132006\J812238D.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:38; Xaa Pos. 2,3,4,5,6,7

Seq#:40; Xaa Pos. 3,4,5,6,7,9,10,11



VERIFICATION SUMMARY

DATE: 04/13/2006

PATENT APPLICATION: US/10/812,238D

TIME: 19:19:31

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04132006\J812238D.raw

L:92 M:283 W: Missing Blank Line separator, <400> field identifier  
L:424 M:283 W: Missing Blank Line separator, <400> field identifier  
L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0  
L:578 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0

**Raw Sequence Listing before editing  
(for reference only)**



IFW16

## RAW SEQUENCE LISTING

DATE: 04/13/2006

PATENT APPLICATION: US/10/812,238D

TIME: 14:35:53

Input Set : A:\D6563SEQ.txt

Output Set: N:\CRF4\04132006\J812238D.raw

3 <110> APPLICANT: Wary, Kishore, K.  
 4     Huntsoe, Joseph O.  
 6 <120> TITLE OF INVENTION: Uses of Vascular Endothelial Growth Factor  
 7     and Type I Collagen Inducible Protein (VCIP)  
 9 <130> FILE REFERENCE: D6563  
 11 <140> CURRENT APPLICATION NUMBER: US 10/812,238D  
 12 <141> CURRENT FILING DATE: 2004-03-29  
 14 <150> PRIOR APPLICATION NUMBER: US 60/458,164  
 15 <151> PRIOR FILING DATE: 2003-03-27  
 17 <160> NUMBER OF SEQ ID NOS: 42

## ERRORED SEQUENCES

**Does Not Comply  
Corrected Diskette Needed**

594 <210> SEQ ID NO: 42  
 595 <211> LENGTH: 37  
 596 <212> TYPE: PRT  
 597 <213> ORGANISM: Artificial Sequence  
 599 <220> FEATURE:  
 600 <223> OTHER INFORMATION: amino acid sequence of PAP2b in the  
 601     pGst-PAP2b-C-cyto construct  
 603 <400> SEQUENCE: 42  
 604 Ser Asp Leu Phe Lys Thr Lys Thr Thr Leu Ser Leu Pro Ala Pro  
 605                   5                   10                   15  
 606 Ala Ile Arg Lys Glu Ile Leu Ser Pro Val Asp Ile Ile Asp Arg  
 607                   20                   25                   30  
 608 Asn Asn His His Asn Met Met  
 609                   35

E--> 612 ??  
 E--> 614 ??  
 E--> 616 ??  
 E--> 618 ??

## VERIFICATION SUMMARY

DATE: 04/13/2006

PATENT APPLICATION: US/10/812,238D

TIME: 14:35:54

Input Set : A:\D6563SEQ.txt

Output Set: N:\CRF4\04132006\J812238D.raw

L:92 M:283 W: Missing Blank Line separator, <400> field identifier  
L:424 M:283 W: Missing Blank Line separator, <400> field identifier  
L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0  
L:578 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0  
L:612 M:333 E: Wrong sequence grouping, Amino acids not in groups!  
L:612 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1  
L:614 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:42  
L:614 M:333 E: Wrong sequence grouping, Amino acids not in groups!  
L:614 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1  
M:332 Repeated in SeqNo=42  
L:616 M:333 E: Wrong sequence grouping, Amino acids not in groups!  
L:616 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1  
L:618 M:333 E: Wrong sequence grouping, Amino acids not in groups!  
L:618 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1